Appendix A

A systems' check to answer the question: Where does intervention for novice reduction fit into what Kentucky already knows about the *Characteristics of Highly Effective Teaching and Learning* that are common to all content areas and the *Kentucky Framework for Teaching* used in the Professional Growth and Effectiveness System (PGES)?

| Characteristics of Highly Effective Teaching and Learning (CHETL) | Novice Reduction Work Process Alignment Instruction; | PGES Alignment Kentucky Framework for Teaching (KFfT) Domain 1: Planning | Leverage process/component system for novice reduction Culturally Responsive |
|--|--|--|---|
| Instructional rigor and student engagement | Environment and Support | and Preparation Domain 3: Instruction | Instruction; Literacy Design Collaborative (LDC); Math Design Collaborative (MDC); Co- Teaching For Gap Closure (CT4GC); Academic Continuum; Advising |
| Teacher instructs the complex processes, concepts and principles contained in state and national standards using differentiated strategies that make instruction accessible to all students. | Instruction; Environment and Support | 1A-Knowledge of Content and Pedagogy 1E-Designing Coherent Instruction | CT4GC; LDC; MDC; Standards and Curriculum; Continuum for Success; Advising; Continuous Improvement |
| Teacher scaffolds instruction to help students reason and develop problem-solving strategies. | Instruction; Environment and Support | 1E-Designing Coherent Instruction 3A-Communication with Students | CT4GC; LDC; MDC; Academic Continuum |
| Teacher orchestrates effective classroom discussions, questioning, and learning tasks that promote higher-order thinking skills. | Instruction; Environment and Support | 3B-Using Questioning and Discussion Techniques | CT4GC; LDC; MDC; Academic Continuum |
| Teacher provides meaningful learning opportunities for students. | Instruction; Environment and Support | 1E-Designing Coherent Instruction | Assessment Literacy; Academic Continuum; Culturally Responsive Instruction |

| Teacher challenges students to think deeply about problems and encourages/models a variety of approaches to a solution. | Instruction; Environment and Support | 1E-Designing Coherent Instruction 3C-Engaging Students in Learning | CT4GC; LDC; MDC; Academic Continuum; Culturally Responsive Instruction; Continuous Improvement |
|--|--|---|--|
| Teacher integrates a variety of learning resources with classroom instruction to increase learning options. | Instruction; Environment and Support | 1B-Demonstrating Knowledge of Students 1D-Demonstrating Knowledge of Resources | CT4GC; LDC; MDC; Academic Continuum; Culturally Responsive Instruction; Continuous Improvement |
| Teacher structures and facilitates ongoing formal and informal discussions based on a shared understanding of rules and discourse. | Instruction; Environment and Support | 3A-Communicating with Students 3B-Using Questioning and Discussion Techniques | Behavior Continuum; Academic Continuum; Continuous Improvement; Assessment Literacy |
| Teacher integrates the application of inquiry skills into learning experiences | Instruction; Environment and Support | 3C-Engaging Students in the Learning | CT4GC; LDC; MDC; Academic Continuum; Culturally Responsive Instruction; Continuous Improvement |
| Teacher clarifies and shares with students learning intentions/targets and criteria for success. | Instruction; Environment and Support | 1C-Selecting Instructional Outcomes 3A-Communicating with Students | Continuum For Success; Academic Continuum; Behavior Continuum; Continuous Improvement |
| Student articulates and understands learning intentions/targets and criteria for success. | Instruction; Environment and Support | Student Voice | Continuum For Success; Academic Continuum; Behavior Continuum; CT4GC; Continuous Improvement |
| Student reads with understanding a variety of texts. | Instruction; Environment and Support | Student Voice | Standards, LDC |
| Student applies and refines inquiry skills. | Instruction; Environment and Support | Student Voice | LDC; MDC; Assessment Literacy; Continuous Improvement; Culturally Responsive Instruction |

| Instructional Relevance | Instruction; Environment and Support; Curriculum and Standards; Continuous Improvement; Assessment | Domain 1: Planning and Preparation Domain 2: Classroom Environment Domain 4: Professional Responsibilities | Culturally Responsive Instruction; LDC; MDC; CT4GC; Deploying Standards; Career Pathways; Continuum for Success; Academic Continuum; Advising; Data Analysis; Continuous Improvement |
|---|---|--|--|
| Teacher designs learning opportunities that allow students to participate in empowering activities in which they understand that learning is a process and mistakes are a natural part of the learning. | Instruction; Environment and Support Curriculum and Standards Continuous improvement and assessment | 1E-Designing Coherent Instruction 2B-Establising a Culture for Learning | LDC; MDC, Culturally Responsive Instruction, CT4GC |
| Teacher links concepts and key ideas to students' prior experiences and understandings, uses multiple representations, examples and explanations. | Instruction; Environment and Support Curriculum and Standards Continuous improvement and assessment | 1B-Demonstrating Knowledge of Students | Standards and Curriculum |
| Teacher incorporates student experiences, interests and real life situations in instruction. | Instruction; Environment and Support Curriculum and Standards Continuous improvement and assessment | 1B-Demonstrating Knowledge of Students | Standards and Curriculum; Culturally Responsive Instruction |
| Teacher selects and utilizes a variety of technology that support student learning. | Instruction; Environment and Support; Standards and Curriculum; Continuous Improvement; Assessment | 1D-Demonstrating Knowledge of Resources 1E-Designing Coherent Instruction | Standards and Curriculum; Continuum for Success |

| Teacher effectively | Instruction; | 1E-Designing | Standards and |
|------------------------------|-----------------|-----------------------|---------------------------|
| incorporates 21st Century | Environment and | Coherent Instruction | Curriculum, Continuum |
| Learning Skills that prepare | Support; | Concrete instruction | for Success |
| students to meet future | Curriculum and | | TOT Success |
| | | | |
| challenges. | Standards; | | |
| | Continuous | | |
| | Improvement; | | |
| - 1 1 11 11 | Assessment | 45.5 | |
| Teacher works with other | Instruction; | 4D-Participating in a | Data Review, Analysis and |
| teachers to make | Environment and | Professional | Use; Continuous |
| connections between and | Support; | Community | Improvement |
| among disciplines. | Standards and | | |
| | Curriculum; | 4E-Growing and | |
| | Continuous | Developing | |
| | Improvement; | Professionally | |
| | Assessment | | |
| Teacher makes lesson | Instruction; | 1D-Demonstrating | Standards and |
| connections to community, | Environment and | Knowledge of | Curriculum; Culturally |
| society and current events. | Support; | Resources | Responsive Instruction; |
| | Standards and | | Advising |
| | Curriculum; | | |
| | Continuous | | |
| | Improvement; | | |
| | Assessment | | |
| Student poses and responds | Instruction; | Student Voice and | Culturally Responsive |
| to meaningful questions. | Environment and | engagement | Instruction; Standards |
| | Support; | | and Curriculum; |
| | Standards and | | LDC; MDC; CT4GC |
| | Curriculum; | | |
| | Continuous | | |
| | Improvement; | | |
| | Assessment | | |
| Student uses appropriate | Instruction; | Student Voice and | Standards and |
| tools and techniques to | Environment and | engagement | Curriculum; Assessment |
| gather, analyze and | Support; | | Literacy; Tiered Academic |
| interpret information from | Standards and | | Interventions; Continuous |
| quantitative and qualitative | Curriculum; | | Improvement |
| evidence. | Continuous | | |
| | Improvement; | | |
| | Assessment | | |

| Student develops | Instruction; | Student Voice and | Standards and |
|---|------------------------|---------------------|--------------------------------------|
| · · | Environment and | | Curriculum; |
| descriptions, explanation, predictions and models | | engagement | · |
| · · | Support; Standards and | | Assessment Literacy; Tiered Academic |
| using evidence. | | | |
| | Curriculum; | | Interventions; Continuous |
| | Continuous | | Improvement |
| | Improvement; | | |
| | Assessment | | |
| Student works | Instruction; | Student Voice and | Standards and |
| collaboratively to address | Environment and | engagement | Curriculum; |
| complex, authentic | Support; | | Assessment Literacy; |
| problems, which require | Standards and | | Tiered Academic |
| innovative approaches to | Curriculum; | | Interventions; Continuous |
| solve. | Continuous | | Improvement; LDC; MDC; |
| | Improvement; | | CT4GC |
| | Assessment | | |
| Student communicates | Instruction; | Student Voice and | Standards and |
| knowledge and | Environment and | engagement | Curriculum; |
| understanding in a variety | Support; | | Assessment Literacy; |
| of real-world forms. | Standards and | | Academic Continuum; |
| | Curriculum; | | Continuous Improvement; |
| | Continuous | | LDC; MDC; CT4GC |
| | Improvement; | | , , |
| | Assessment | | |
| Student communicates | Instruction; | Student Voice and | Standards and |
| knowledge and | Environment and | engagement | Curriculum; |
| understanding for a variety | Support; | 08486 | Assessment Literacy; |
| of purposes. | Standards and | | Academic Continuum; |
| or purposes. | Curriculum; | | Continuous Improvement; |
| | Continuous | | LDC; MDC; CT4GC |
| | Improvement; | | LDC, WIDC, C14GC |
| | Assessment | | |
| Knowledge of Content | | Domain 1. Dlanning | Danlaying Standards |
| Knowledge of Content | Standards and | Domain 1: Planning | Deploying Standards; |
| | Curriculum; | and Preparation | Career Pathways; |
| | Instruction; | D | Continuum For Success; |
| | Environment and | Domain 2: Classroom | Culturally Responsive |
| | Support | Environment | Instruction; LDC; MDC; |
| | | | CT4GC; Academic |
| | | Domain 3: | Continuum; Advising |
| | | Instruction | |
| | | | |
| | | Domain 4: | |

| | | Professional | |
|-----------------------------|-----------------|----------------------|-------------------------|
| | | Responsibilities | |
| Teacher demonstrates an | Standards and | 1A-Demonstrating | Standards and |
| understanding and in depth | Curriculum; | Knowledge of | Curriculum; LDC; MDC; |
| knowledge of content and | Instruction; | Content and | CT4C; Academic |
| maintains an ability to | Environment and | Pedagogy | Continuum |
| convey this content to | Support | | |
| students. | | 3A-Communicating | |
| | | with Students | |
| Teacher maintains on going | Standards and | 1A-Demonstrating | Standards and |
| knowledge and awareness | Curriculum; | Knowledge of | Curriculum; Continuous |
| of current content | Instruction; | Content and | Improvement |
| developments. | Environment and | Pedagogy | |
| | Support | | |
| | | 4E-Growing and | |
| | | Developing | |
| | | Professionally | |
| Teacher designs and | Standards and | 1E-Designing | Standards and |
| implements standards | Curriculum; | Coherent Instruction | Curriculum; Continuous |
| based courses/lessons/units | Instruction; | | Improvement; Culturally |
| using state and national | Environment and | | Responsive Instruction |
| standards. | Support | | |
| Teacher uses and promotes | Standards and | 1A-Demonstrating | Standards and |
| the understanding of | Curriculum; | Knowledge of | Curriculum; Continuous |
| appropriate content | Instruction; | Content and | Improvement; Culturally |
| vocabulary. | Environment and | Pedagogy | Responsive Instruction |
| | Support | | |
| Teacher provides essential | Standards and | 3C-Engaging Students | Academic Continuum; |
| supports for students who | Curriculum; | in the Learning | Assessment Literacy; |
| are struggling with the | Instruction; | | Advising; Continuous |
| content. | Environment and | 3E-Demonstrating | Improvement; Culturally |
| | Support | Flexibility and | Responsive Instruction, |
| | | Responsiveness | Behavior Continuum |
| Teacher accesses a rich | Standards and | 1A-Demonstrating | Academic Continuum; |
| repertoire of instructional | Curriculum; | Knowledge of | Assessment Literacy; |
| practices, strategies, | Instruction; | Content and | Advising; Continuous |
| resources and applies them | Environment and | Pedagogy | Improvement; Culturally |
| appropriately. | Support | | Responsive Instruction; |
| | | 1E-Designing | Behavior Continuum |
| | | Coherent Instruction | |

| Student demonstrates growth in content knowledge. | Standards and Curriculum; Instruction; Environment and Support | Student Voice and engagement | Academic Continuum; Assessment Literacy; Advising; Continuous Improvement; Culturally Responsive Instruction; Behavior Continuum; Standards and Curriculum |
|---|--|--|--|
| Student uses and seeks to expand appropriate content vocabulary. | Standards and Curriculum; Instruction; Environment and Support | Student Voice and engagement | Academic Continuum; Assessment Literacy; Advising; Continuous Improvement; Culturally Responsive Instruction; Behavior Continuum; Standards and Curriculum |
| Student connects ideas across content areas. | Standards and Curriculum; Instruction; Environment and Support | Student Voice and engagement | Academic Continuum; Assessment Literacy; Advising, Continuous Improvement; Culturally Responsive Instruction; Behavior Continuum; Standards and Curriculum |
| Student uses ideas in realistic problem situations. | Standards and Curriculum; Instruction; Environment and Support | Student Voice and engagement | Continuum for Student Success; Standards and Curriculum |
| Learning Climate | Instruction; Environment and Support | Domain 1: Planning and Preparation Domain 2: Classroom Environment Domain 3: Instruction | Academic Continuum; Advising; Bullying Prevention; Positive Behavioral Interventions and Supports (PBIS); Behavior Continuum; Culturally Responsive Instruction; LDC; MDC; CT4GC |
| Teacher creates learning environments where students are active participants as individuals and as members of collaborative groups. | Instruction; Environment and Support | 2B-Establishing a Culture for Learning | Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Instruction |

| Teacher motivates students and nurtures their desire to | Instruction; Environment and | 2A-Creating an Environment of | Academic Continuum; Advising; Bullying |
|---|---------------------------------|-------------------------------|--|
| learn in a safe, healthy and supportive environment | Support | Respect and Rapport | Prevention; PBIS; Behavior Continuum; |
| which develops compassion | | 2E-Organizing | Culturally Responsive |
| and mutual respect. | | Physical Space | Instruction |
| Teacher cultivates cross | Instruction; | 1B-Demonstrating | Culturally Responsive |
| cultural understandings and | Environment and | Knowledge of | Instruction; Continuous |
| the value of diversity | Support | Students | Improvement |
| | | | |
| | | 2A-Creating an | |
| | | Environment of | |
| | | Respect and Rapport | |
| Teacher encourages | Instruction; | 1C-Selecting | Academic Continuum; |
| students to accept | Environment and | Instructional | Advising; Bullying |
| responsibility for their own | Support | Outcomes | Prevention; PBIS; |
| learning and accommodates | | | Behavior Continuum; |
| the diverse learning needs | | 2B-Establishing a | Culturally Responsive |
| of all students. | | Culture for Learning | Instruction; Continuous |
| | | | Improvement |
| Teacher displays effective | Instruction; | 2C-Managing | Academic Continuum; |
| and efficient classroom | Environment and | Classroom | Advising; Bullying |
| management that includes | Support | Procedures | Prevention; PBIS; |
| classroom routines that | | | Behavior Continuum; |
| promote comfort, order and | | 2D-Managing Student | Culturally Responsive |
| appropriate student | | Behavior | Instruction |
| behaviors. | | | |
| Teacher provides student | Instruction; | 1D-Demonstrating | Academic And Behavior |
| equitable access to | Environment and | Knowledge of | Continuum, LDC; MDC; |
| technology, space tools and | Support | Resources | CT4GC |
| time. | | | |
| | | 2E-Organizing | |
| | | Physical Space | |
| Teacher effectively allocates | Instruction; | 2C-Managing | Academic Continuum; |
| times for students to | Environment and | Classroom | Advising; Bullying |
| engage in hands on | Support | Procedures | Prevention; PBIS; |
| experiences, discuss and | | | Behavior Continuum; |
| process content, and make | | 3C-Engaging Students | Culturally Responsive |
| meaningful connections. | | in the Learning | Instruction |
| Teacher designs lessons | Instruction; | 1E-Designing | Academic Continuum; |
| that allow students to | Environment and | Coherent Instruction | Advising; Bullying |
| participate in empowering | Support | | Prevention; PBIS; |

| activities in which they understand that learning is a process and mistakes are a natural part of learning. | | 2B-Establishing a Culture for Learning | Behavior Continuum; Culturally Responsive Instruction |
|---|--|---|--|
| Teacher creates an environment where student work is valued, appreciated and used as a learning tool. | Instruction; Environment and Support | 2B-Establishing a Culture for Learning 3D-Using Assessment in Instruction | Academic Continuum, Advising, Bullying Prevention, PBIS, Behavior Continuum, Culturally Responsive, |
| Student accepts responsibility for his/her own learning | Instruction; Environment and Support | Student Voice and engagement | Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Istruction |
| Student actively participates and is authentically engaged. | Instruction; Environment and Support | Student Voice and engagement | Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Instruction |
| Student collaborates/teams with other students | Instruction; Environment and Support | Student Voice and engagement | Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Instruction |
| Student exhibits a sense of accomplishment and confidence | Instruction; Environment and Support | Student Voice and engagement | Academic Continuum, Advising, Bullying Prevention, PBIS, Behavior Continuum, Culturally Responsive, |
| Student takes educational risks in class. | Instruction; Environment and Support | Student Voice and engagement | Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Instruction |
| Student practices and engages in safe, responsible and ethical use of technology. | Instruction; Environment and Support | Student Voice and engagement | Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; |

| Classroom Assessment and Reflection | Assessment Literacy; Data, Analysis and Use | Domain 1: Planning and Preparation Domain 2: Classroom Environment Domain 3: Instruction | Culturally Responsive Instruction; Continuous Improvement Continuous Improvement; Assessment Literacy |
|--|--|---|---|
| | | Domain 4: Professional Responsibilities | |
| Teacher uses multiple methods to systematically gather data about student understanding and ability. | Assessment Literacy; Data, Analysis and Use | 1F-Designing Student Assessment 3D-Using Assessment in Instruction | Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement |
| | | 4A-Reflecting on Teaching | |
| Teacher uses student work/data, observations of instruction, assignments and interactions with colleagues to reflect on and improve teaching practice. | Assessment Literacy; Data, Analysis and Use | 1F-Designing Student Assessment 3D-Using Assessment in Instruction 4A-Reflecting on | Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement |
| Teacher revises instructional strategies based upon student achievement data. | Assessment Literacy; Data, Analysis and Use | Teaching 1F-Designing Student Assessments 3D-Using Assessment in Instruction 4A-Reflecting on Teaching | Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum |
| Teacher uncovers students' prior understanding of the concepts to be addressed and addresses students' | Assessment Literacy; Data, Analysis and Use | 1F-Designing Student Assessments 3D-Using Assessment in Instruction | Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum |

| missonsontions/incomplets | | | |
|--|----------------|----------------------|---------------------------|
| misconceptions/incomplete conceptions. | | | |
| Teacher co-develops scoring | Assessment | 1C-Selecting | Assessment Literacy; |
| guides/rubrics with | Literacy; | Instructional | Data Review, Analysis and |
| students and provides | Data, Analysis | Outcomes | Use; Continuous |
| adequate modeling to make | and Use | | Improvement; Academic |
| clear the expectations for | | 3D-Using Assessment | Continuum |
| quality performance. | | in Instruction | |
| | | | |
| Teacher guides students to | Assessment | 2B-Establishing a | Assessment Literacy; |
| apply rubrics to assess their | Literacy; | Culture for Learning | Data Review, Analysis and |
| performance and identify | Data, Analysis | | Use; Continuous |
| improvement strategies. | and Use | 3D-Using Assessment | Improvement; Academic |
| , , , , , , , , , , , , , , , , , , , | | in Instruction | Continuum |
| Teacher provides regular | Assessment | 3D-Using Assessment | Assessment Literacy; |
| timely feedback to students | Literacy; | in Instruction | Data Review, Analysis and |
| and parents that moves | Data, Analysis | | Use; Continuous |
| learners forward. | and Use | 4C-Communicating | Improvement; Academic |
| | | with Families | Continuum |
| Teacher allows students to | Assessment | 3D-Using Assessment | Assessment Literacy; |
| use feedback to improve | Literacy; | in Instruction | Data Review, Analysis and |
| their work before a grade is | Data, Analysis | | Use; Continuous |
| assigned. | and Use | 3E-Demonstrating | Improvement; Academic |
| | | Flexibility and | Continuum |
| | | Responsibility | |
| Teacher facilitates students | Assessment | 2B-Estabilishing a | Assessment Literacy; |
| in self- and peer- | Literacy; | Culture for Learning | Data Review, Analysis and |
| assessments. | Data, Analysis | | Use; Continuous |
| | and Use | 3D-Using Assessment | Improvement; Academic |
| | | in Instruction | Continuum |
| Teacher reflects on | Assessment | 3D-Using Assessment | Assessment Literacy; |
| instruction and makes | Literacy. | in Instruction | Data Review, Analysis and |
| adjustments as student | Data, Analysis | | Use; Continuous |
| learning occurs. | and Use | 3E-Demonstrating | Improvement; Academic |
| | | Flexibility and | Continuum |
| | | Responsibility | |
| | | 4A-Reflecting on | |
| | | Instruction | |
| Student recognizes what | Assessment | Student Voice and | Assessment Literacy; |
| proficient work looks like | Literacy; | engagement | Data Review, Analysis and |
| and determines steps | | | Use; Continuous |

| necessary for improving | Data, Analysis | | Improvement; Academic |
|-----------------------------|----------------|-------------------|---------------------------|
| , , , | | | |
| his/her work. | and Use | | Continuum |
| Teacher and student | Assessment | Student Voice and | Assessment Literacy; |
| monitors progress toward | Literacy; | engagement | Data Review, Analysis and |
| reaching learning targets. | Data, Analysis | | Use; Continuous |
| | and Use | | Improvement; Academic |
| | | | Continuum |
| Student develops and/or | Assessment | Student Voice and | Assessment Literacy; |
| uses scoring guides | Literacy; | engagement | Data Review, Analysis and |
| periodically to assess | Data, Analysis | | Use; Continuous |
| his/her own work or that of | and Use | | Improvement; Academic |
| peers. | | | Continuum |
| Student uses teacher and | Assessment | Student Voice and | Assessment Literacy; |
| peer feedback to improve | Literacy; | engagement | Data Review, Analysis and |
| his/her work. | Data, Analysis | | Use; Continuous |
| | and Use | | Improvement; Academic |
| | | | Continuum |
| Both teacher and students | Assessment | Student Voice and | Assessment Literacy; |
| reflect on work and make | Literacy; | engagement | Data Review, Analysis and |
| adjustments as learning | Data, Analysis | | Use; Continuous |
| occurs. | and Use | | Improvement; Academic |
| | | | Continuum |